Docket No.

240523US10

# WINHER STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF:

Roy L AX, et al.

SERIAL NO: 10/650,791

GAU:

1632

FILED:

August 29, 2003

**EXAMINER:** 

FOR:

FERTILITY PREDICTION OF MAMMALIAN MALES AND POLYCLONAL ANTIBODIES FOR THE

PREDICTION THEREOF

# **INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97**

**COMMISSIONER FOR PATENTS** ALEXANDRIA, VIRGINIA 22313

SIR:

Applicant(s) wish to disclose the following information.

## REFERENCES

The applicant(s) wish to make of record the references listed on the attached form PTO-1449. Copies of the listed references are attached, where required, as are either statements of relevancy or any readily available English translations of pertinent portions of any non-English language references.

A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

#### **RELATED CASES**

Attached is a list of applicant's pending application(s) or issued patent(s) which may be related to the present
application. A copy of the patent(s), together with a copy of the claims and drawings of the pending application(s)
is attached along with PTO 1449.

A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

#### **CERTIFICATION**

Each item of information contained in this information disclosure statement was first cited in any communication
from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of
this statement.

No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

## **DEPOSIT ACCOUNT**

Please charge any additional fees for the papers being filed herewith and for which no check or credit card payment is enclosed herewith, or credit any overpayment to deposit account number 15-0030. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.

Eckhard H. Kuesters

Registration No. 28,870

Vincent K. Shier, Ph.D.

Registration No. 50,552

**Customer Number** 

22850

Tel. (703) 413-3000 Fax. (703) 413-2220 (OSMMN 05/03)

Form PTO 1449 PATENTE TRI ATTY DOCKET NO. SERIAL NO. S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE, 10/650,791 240523US20 **APPLICANT** LIST OF REFERENCES CITED BY APPLICANT Roy L AX **GROUP** FILING DATE 1632 August 29, 2003 **U.S. PATENT DOCUMENTS** FILING DATE SUB **DOCUMENT EXAMINER** CLASS DATE NAME IF APPROPRIATE **CLASS** NUMBER INITIAL 06/12/01 McVicker, et al. 6,245,577 AA 2002/0048745 04/25/02 Zhang, et al. AB 2001/0008764 07/19/01 Ax, et al. AC 07/18/95 AD 5,434,139 Ax, et al. AE AF AG AH ΑI AJ ΑK AL AM AN FOREIGN PATENT DOCUMENTS **TRANSLATION** DOCUMENT COUNTRY DATE **NUMBER** YES NO AO AP AQ AR AS AT ΑU AV OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.) R.W. LENZ, et al., "PROTEOGLYCAN FROM BOVINE FOLLICULAR FLUID ENHANCES AN ACROSOME REACTION IN BOVINE SPERMATOZOA", Biochemical and Biophysical Research Communications, Vol. 106, No. 4, June 30, 1982, pp. AW 1098-1098 P. MANJUNATH, et al., "PURIFICATION AND BIOCHEMICAL CHARACTERIZATION OF THREE MAJOR ACIDIC PROTEINS (BSP-A<sub>1</sub>, BSP-A<sub>2</sub> and BSP-A<sub>3</sub>) FROM BOVINE SEMINAL PLASMA", Biochem. J., Vol. 241, 1987, pp. 685-692 AX T.C. McCAULEY, et al., "PURIFICATION AND CHARACTERIZATION OF FERTILITY-ASSOCIATED ANTIGEN (FAA) IN BOVINE SEMINAL FLUID", Molecular Reproduction and Development, 54, pp. 145-153, 1999 AY T.C. McCAULEY, et al., "IDENTIFICATION OF A HEPARIN-BINDING PROTEIN IN BOVINE SEMINAL FLUID AS TISSUE INHIBITOR OF Additional References sheet(s) attached ΑZ METALLOPROTEINASES-2", Molecular Reproduction and Development, 58, pp. 336-341, 2001 **Date Considered** Examiner \*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ATTY DOCKET NO. SERIAL NO. EPARTMENT OF COMMERCE **Form PTO 1449** ATENT AND TRADEMARK OFFICE (Modified) 10/650,791 240523US20 **APPLICANT** LIST OF REFERENCES CITED BY APPLICANT Roy L AX **GROUP FILING DATE** August 29, 2003 1632 OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.) D.J. MILLER, et al., "HEPARIN-BINDING PROTEINS FROM SEMINAL PLASMA BIND TO BOVINE SPERMATOZOA AND MODULATE CAPACITATION BY HEPARIN", Biology of Reproduction, 42, pp. 899-915, 1990 AAA L.R. SPROTT, et al., "ARTIFICIAL INSEMINATION OUTCOMES IN BEEF FEMALES USING BOVINE SPERM WITH A DETECTABLE FERTILITY-ASSOCIATED ANTIGEN", J. Anim. Sci., 78, 2000, pp. 795-798 AAB A.M. RODRIGUEZ, et al., "IDENTIFICATION, LOCALIZATION, AND EXPRESSION OF TWO NOVEL HUMAN GENES SIMILAR TO DEOXYRIBONUCLEASE I", Genomics, 42, pp. 507-513, 1997 AAC I. THERIEN, et al, "EFFECT OF SEMINAL PHOSPHOLIPID-BINDING PROTEINS AND FOLLICULAR FLUID ON BOVINE SPERM CAPACITATION", Biology of Research, 65, pp. 41-51, 2001 AAD M.E. BELLIN, et al., "FERTILITY OF RANGE BEEF BULLS GROUPED ACCORDING TO PRESENCE OR ABSENCE OF HEPARIN-BINDING PROTEINS IN SPERM MEMBRANES AND SEMINAL FLUIDS", J. Anim. Sci., 72, 1994, pp. 2441-2448 AAE R.W. LENZ, et al., "PREDICTING FERTILITY OF DAIRY BULLS BY INDUCING ACROSOME REACTIONS IN SPERM WITH CHONDROITIN SULFATES", J. Dairy Sci., 71, 1988, pp. 1073-1077 AAF J.L. MARKS, et al., "RELATIONSHIP OF NONRETURN RATES OF DAIRY BULLS TO BINDING AFFINITY OF HEPARIN TO SPERM", J. Dairy Sci., 68, 1985, pp. 2078-2082 AAG M.T. O'CONNOR, et al., "COMPARISONS OF COMPUTER EVALUATIONS OF SPERMATOZOAL MOTILITY WITH STANDARD LABORATORY TESTS AND THEIR USE FOR PREDICTING FERTILITY", Journal of Animal Science, Vol. 53, No. 5, 1981, pp. 1368-1376 R.G. SAACKE, "SEMEN QUALITY IN RELATION TO SEMEN PRESERVATION", J. Dairy Sci., 66, 1983, pp. 2635-2644 AAI Proceedings of the Fourth Technical Conference on Artificial Insemination and Reproduction Sponsored by the National Association of Animal Breeders, February 17-19, 1972 AAJ P.M. SALING, "MAMMALIAN SPERM INTERACTION WITH EXTRACELLULAR MATRICES OF THE EGG", Oxford AAK | Reviews of Reproductive Biology, Vol. 11, 1989, pp.340-388 P.J. CHENOWETH, et al., "A NEW BULL BREEDING SOUNDNESS EVALUATION FORM", Society for Theriogenology, Proceedings for Annual Meeting, August 14-15, 1992, pp. 63-70 AAL C.H. WHITFIELD, et al., "RELATIONSHIP BETWEEN FERTILITY OF BOVINE SEMEN AND IN VITRO INDUCTION OF ACROSOME REACTIONS BY HEPARIN", Theriogenology, 38, pp. 11-20, 1992 AAM M.E. BELLIN, et al., "MONOCLONAL ANTIBODY DETECTION OF HEPARIN-BINDING PROTEINS ON SPERM CORRESPONDS TO INCREASED FERTILITY OF BULLS", J. Anim. Sci., 74, 1996, pp. 173-182 AAN M.E. BELLIN, et al., "FERTILITY-ASSOCIATED ANTIGEN ON BULL SPERM INDICATES FERTILITY POTENTIAL", J. Anim. Sci., 76, 1998, pp. 2032-2039 AAO J.J. CALVETE, et al., "THE PRIMARY STRUCTURE OF BSP-30K, A MAJOR LIPID-, GELATIN-, AND HEPARIN-BINDING GLYCOPROTEIN OF BOVINE SEMINAL PLASMA", FEBS Letters, 399, 1996, pp. 147-152 **AAP** A.M. CANCEL, et al., "OSTEOPONTIN IS THE 55-KILODALTON FERTILITY-ASSOCIATED PROTEIN IN HOLSTEIN BULL SEMINAL PLASMA", Biology of Reproduction, 57, 1997, pp. 1293-1301 AAQ **Date Considered** Examiner \*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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(Modified)		PATENT AND TRADEMARK OFFICE (4)	240523US20	10/650,791		
			APPLICANT			
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